

REMARKS

Claims 1-28 are pending in the application. Claims 1 and 28 are independent.

On page 2 of the Office Action, Claims 1-25 and 28 are rejected under 35 U.S.C. §103(a) as being unpatentable over Vidlund (U.S. Patent No. 6,033,394) in view of Thompson (U.S. Patent No. 5,820,591). Applicant respectfully traverses this rejection. Vidlund '394 discloses a catheter support structure including "a plurality of helical support struts 72a , 72b," (Column 3, Lines 21-22) which are preferably "fabricated from a solid blank of medical grade stainless steel tubing," (Column 4, Lines 1-2). In particular, Vidlund '394 discloses:

"the combination of clockwise and counter-clockwise helical support struts result in the clockwise struts 72a and the counter-clockwise struts 72b urging toward expansion and contraction, respectively, in response to a counter-clockwise application of torque. As a result, the expansion and contraction forces tend to counteract each other **resulting in enhanced geometric integrity and enhanced torque transmission response,**" (Column 4, Lines 60-68)(emphasis added).

Furthermore, the support structure of Vidlund is surrounded by "an outer polymer jacket 90," (Column 3, Lines 6), which may be "any suitable flexible material for use in the vascular system," (Column 3, Lines 6-7).

Thompson '591 discloses compound steering assemblies which "provides a catheter having more than one steering mechanism for bending the distal section by external manipulation into more than one curvilinear direction," (Column 2, Lines 17-20), and further "may include a proximal section containing a preformed portion in conjunction with a distal steering mechanism," (Column 2, Lines 26-28). In either embodiment, "flexible heat shrink tubing 56...encloses the compound steering assembly," (Column 4, Lines 52-54).

Vidlund '394, either alone or in combination with Thompson '591, fails to disclose or render obvious Applicant's invention. Specifically, this combination of references fails to disclose what is stated in Applicant's Claims 1 and 28: "a deflection region having a longitudinal axis and a length, the deflection region having *a wall, the wall having at least two sections, each section having a specific density which is different from each other section,*" (emphasis added). Both Vidlund '394 and Thompson '591 disclose steering systems, however, they do not teach or suggest having "a wall...having at least two sections...having a specific density," as in Applicant's Claims 1 and 28. Vidlund '394 specifically discloses "an outer polymer jacket 90," (Column 3, Lines 6). The outer polymer jacket of Vidlund '394 cannot be formed into a wall having at least two sections having differing specific densities as Vidlund '394 specifically states that the outer jacket be constructed from a uniform material, preferably "nylon or urethane," (Column 3, Line 8). Moreover, Thompson '591 discloses using a steering mechanism surrounded by "flexible heat shrink tubing," (Column 4, Line 52). The heat shrink tubing of Thompson '591 does not have at least two section having differing specific densities, and thus does not teach or suggest Applicant's Claims 1 or 28.

The combination of Vidlund '394 and Thompson '591 neither teaches nor suggests a catheter system expressly or inherently having the requirements as claimed by Applicant. As such, Claims 1 and 28 are believed to overcome the rejection under 35 U.S.C. §103(a). Furthermore, Claims 2-24 are believed to be allowable as they depend from independent Claim 1.

On page 2 of the Office Action, Claim 26 is rejected under 35 U.S.C. §103(a) as being unpatentable over Vidlund in view of Thompson as applied to Claims 1-25 and 28 above, and

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further in view of Imran, et al. (U.S. Patent No. 5,656,029). Claim 26 is believed to be allowable as it depends from independent Claim 1.

On page 3 of the Office Action, Claim 27 is rejected under 35 U.S.C. §103(a) as being unpatentable over Vidlund in view of Thompson as applied to Claims 1-25 and 28 above, and further in view of Ponzi, et al. (U.S. Patent No. 6,402,719). Claim 27 is believed to be allowable as it depends from independent Claim 1.

For all of the above reasons, the claim objections are believed to have been overcome placing Claims 1-28 in condition for allowance, and reconsideration and allowance thereof is respectfully requested.

The Examiner is encouraged to telephone the undersigned to discuss any matter that would expedite allowance of the present application.

Respectfully submitted,



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